IN THE CLAIMS:

Please cancel claims 7, 12, and 17, without prejudice.

Please add claims 19 and 20.

(Currently amended) A signal phase shifting circuit operative to shift the phase of [an 1. input] a STROBE signal based on a [reference] clock signal comprising:

a [reference] clock signal period dividing circhit having:

- a first input that receives the [reference] clock signal,
- a second input that receives a feedback control signal,
- a phase shift generating circuit opératively responsive to the [reference] clock signal and the feedback control signal;

an output that provides a voltage controlled delay control signal for a variable delay circuit, and

a feedback delay matching array operatively coupled to an output of the phase shift generating circuit, that produces the feedback control signal; and

the variable delay circuit including an input that receives the [input] STROBE signal and being operatively responsive to the delay control signal, to provide a phase shifted output signal of the [input] STROBE signal associated with a double data rate communication.

- 2. (Original) The signal phase shifting circuit of claim 1 wherein the variable delay circuit includes a delay stage and at least one phase shifted output signal drive buffer operatively coupled to the délay stage.
- 3. (Original) The signal phase shifting circuit of claim 2 wherein the feedback delay matching array includes a plurality of serially coupled buffer stages operatively coupled to compensate for delay variations associated with the at least one phase shifted output signal drive buffer.
- 4. (Currently amended) The signal phase shifting circuit of claim 1 wherein the variable delay circuit includes a delay stage and at least one [mulitplexer] multiplexer operatively coupled to vary a delay setting of the variable delay stage, and at least one

phase shifted output signal drive buffer operatively coupled to an output of the at least one [mulitplexer] multiplexer.

- 5. (Currently amended) The signal phase shifting circuit of claim 4 wherein the feedback delay matching array includes a plurality of serially coupled [mulitplexer] multiplexer and buffer stages operatively coupled to compensate for delay variations associated with the at least one [mulitplexer] multiplexer and the at least one phase shifted output signal drive buffer in the variable delay circuit.
- 6. (Currently amended) The signal phase shifting circuit of claim 1 including a data latch having a first input operatively coupled to receive data, and a second input operatively coupled to receive the phase shifted output signal of the STROBE signal.
- 7. (Canceled).

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8. (Currently amended) The signal phase shifting circuit of claim 1 wherein the phase shift generating circuit includes a plurality of serially coupled buffers that form a controlled delay stage and wherein the feedback delay matching array includes a plurality of serially coupled [mulitplexer] multiplexer and buffer stages operatively coupled to the plurality of serially coupled buffers.

9. (Currently amended) A signal phase shifting circuit operative to shift the phase of a [strobe] <u>STROBE</u> signal based on a [reference] <u>clock signal comprising</u>:

a reference signal period dividing circuit having.

- a first input that receives the [reference] clock signal,
- a second input that receives a feedback control signal,
- a phase shift generating circuit that includes a delay lock loop circuit operatively responsive to the reference signal and the feedback control signal wherein the delay lock loop circuit includes:

a phase/frequency detection circuit that compares the reference signal and the feedback control signal,

a charge pump circuit operatively coupled to the phase/frequency detection/circuit, and

a loop filter operatively responsive to an output from the charge pump circuit, that provides a delay control signal for a variable delay circuit, and

a feedback delay matching array operatively coupled to an output of the phase shift generating circuit, that produces the feedback control signal; and

the variable delay circuit including an input that receives the [input] <u>STROBE</u> signal and being operatively responsive to the delay control signal, to provide a phase shifted output signal <u>of the STROBE signal</u>.

- 10. (Currently amended) The signal phase shifting circuit of claim 9 wherein the variable delay circuit includes a delay stage and at least one [mulitplexer] multiplexer operatively coupled to vary a delay setting of the variable delay stage, and at least one phase shifted output signal drive buffer operatively coupled to an output of the at least one [mulitplexer] multiplexer.
- 11. (Currently amended) The signal phase shifting circuit of claim 10 wherein the feedback delay matching array includes a plurality of serially coupled [mulitplexer] multiplexer and buffer stages operatively coupled to compensate for delay variations associated with the at least one [mulitplexer] multiplexer and the at least one phase shifted output signal drive buffer in the var1able delay circuit.

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- 12. (Canceled).
- 13. (Currently amended) The signal phase shifting circuit of claim 9 wherein the phase shift generating circuit includes a plurality of serially coupled buffers that form a controlled delay stage and wherein the feedback delay matching array includes a plurality of serially coupled [mulitplexer] multiplexer and buffer stages operatively coupled to the plurality of serially coupled buffers.
- 14. (Currently amended) A data receiving circuit having a signal phase shifting circuit operative to shift the phase of a [strobe] STROBE signal based on a [reference] clock signal comprising:
 - a reference signal period dividing circuit having:
 - a first input that receives the [reference] clock signal,
 - a second input that receives a feedback control signal,
 - a phase shift generating circuit that includes a delay lock loop circuit operatively responsive to the reference signal and the feedback control signal wherein the delay lock loop circuit includes:
 - a phase/frequency detection circuit that compares the reference signal and the feedback control signal,
 - a charge pump/circuit operatively coupled to the phase/frequency detection circuit, and
 - a loop filter peratively responsive to an output from the charge pump circuit, that provides a control signal for a variable delay circuit, and
- a feedback delay matching array operatively coupled to an output of the phase shift generating circuit, that produces the feedback control signal; the variable delay circuit being operatively responsive to the control signal that provides a phase shifted output signal, and including an input that receives the [input] STROBE signal; and
- a data latch having a first input operatively coupled to receive data, and a second input operatively coupled to receive the phase shifted output signal.
- 15. (Currently amended) The signal phase shifting circuit of claim 14 wherein the variable delay circuit includes a delay stage and at least one [mulitplexer] multiplexer operatively coupled to vary a delay setting of the variable delay stage, and at least one

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phase shifted output signal drive buffer operatively coupled to an output of the at least one [mulitplexer] multiplexer.

- 16. (Currently amended) The signal phase shifting circuit of claim 15 wherein the feedback delay matching array includes a plurality of serially coupled [mulitplexer] multiplexer and buffer stages operatively coupled to compensate for delay variations associated with the at least one [mulitplexer] multiplexer and the at least one phase shifted output signal drive buffer in the variable delay circuit.
- 17. (Canceled).
- 18. (Currently amended) The signal phase shifting circuit of claim 14 wherein the phase shift generating circuit includes a plurality of serially coupled buffers that form a controlled delay stage and wherein the feedback delay matching array includes a plurality of serially coupled [mulitplexer] multiplexer and buffer stages operatively coupled to the plurality of serially coupled buffers.

19. (New) depend on 1 A signal phase shifting circuit operative to shift the phase of [an input] a STROBE signal based on a [reference] clock signal comprising:

a [reference] clock signal period dividing circuit having:

a first input that receives the [reference] clock signal,

a second input that receives a feedback control signal,

a phase shift generating circuit operatively responsive to the [reference] <u>clock signal</u> and the feedback control signal;

an output that provides a voltage controlled delay control signal for a variable delay circuit, and

a feedback delay matching array operatively coupled to an output of the phase shift generating circuit, that produces the feedback control signal; and

the variable delay circuit including an input that receives the [input] <u>STROBE</u> signal and being operatively responsive to the delay control signal, to provide a phase shifted output signal of the [input] <u>STROBE</u> signal <u>associated with a double data rate</u> <u>communication</u>.



19. (New) The signal phase shifting circuit of claim wherein the feedback delay matching array includes a number of serially coupled multiplexers and buffers such that the number of serially coupled multiplexers and buffers and a predetermined fraction of a clock period are reciprocals of one another.

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20. (New) The signal phase shifting circuit of claim 9 wherein the feedback delay matching array includes a number of serially coupled multiplexers and buffers such that the number of serially coupled multiplexers and buffers and a predetermined fraction of a clock period are reciprocals of one another.